ORIGINAL

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Rulemaking to Amend Parts 1, 2, 21,	)	CC Docket No. 92-297
And 25 of the Commission's Rules to	)	
Redesignate the 27.5-29.5 GHz Frequency	)	
Band, to Reallocate the 29.5-30.0 GHz	)	
Frequency Band, To Establish Rules and	)	
Policies For The Local Multipoint	)	
Distribution Service And For The	)	
Fixed-Satellite Services	)	

To: The Commission

COMMENTS OF LOCKHEED MARTIN CORPORATION

The Space and Strategic Missiles Sector of Lockheed Martin Corporation ("Lockheed Martin") hereby submits its comments in response to the Third Notice of Proposed Rulemaking in the above-referenced proceeding, which concerns the future use of the 28 GHz frequency bands. See Third Notice of Proposed Rulemaking in CC Docket No. 92-297, FCC 95-287 (released July 28, 1995) ("Third NPRM"). Lockheed Martin previously submitted ex parte comments in this proceeding on June 9, 1995, which addressed the joint spectrum allocation plan advanced by Boeing Company, Hughes Communications, Inc., Teledesic Corporation, and Texas Instruments, Inc. See Third NPRM, FCC 95-287, slip op. at 19 n.51.

I. STATEMENT OF INTEREST

Lockheed Martin is a major aerospace and defense company specializing in the development of sophisticated spacecraft, launch systems, missiles and other high technology products. Its primary interest in this proceeding is derived from its concern about the

availability of sufficient spectrum at 28 GHz on a global basis to permit near term development and deployment of the next generation of domestic and international satellite systems.

II. DISCUSSION

A. The Commission Should Consider Carefully The Long-Term Needs Of The U.S. Satellite Industry For Spectrum At 28 GHz.

Lockheed Martin understands the Commission's desire to spur more competition in the multi-channel video programming delivery ("MVPD") market. However, preserving access to these bands for vital new satellite technologies will be a critical step in fostering improved global communications. While multiple MVPD services already exist in many markets, including traditional cable, wireless cable, direct broadcast satellites and emerging video dialtone services, satellite-based technology is poised to create innovative new services that will offer greatly enhanced telecommunications capabilities around the globe for wideband or high speed interactive video, voice and data applications. The advent of these space systems will spur high-wage job growth in the United States, and permit companies like Lockheed Martin to expand commercial operations as defense-related programs are curtailed.

In view of the many novel and substantial benefits of developing satellite systems in the 28 GHz bands, Lockheed Martin believes that the Commission may too hastily have embraced the notion that all proposed uses for these bands should be accommodated within the frequencies from 27.5-30.0 GHz. In particular, the Commission seems to have accepted without inquiry the contention of LMDS commenters that a 12-18 month delay in implementation of LMDS would be a necessary product of an allotment at 40 GHz, and that

providing service in this band "would result in a cost increase sufficient to make LMDS not commercially viable." Third NPRM, FCC 95-287, slip op. at 15 (¶ 36). Lockheed Martin does not believe that either of these propositions has been demonstrated in the record of this proceeding.

The Commission must be concerned about ensuring the availability of sufficient spectrum at 28 GHz not only for use by currently-proposed satellite services and systems, but for those that will, in the future, seek to establish or expand their systems. In this regard, if other bands are technically and commercially suitable for development of LMDS, then the long-term public and national interest may best be served by accommodating the proposed LMDS service in this other spectrum.

B. The Implications of Adopting Competitive Bidding Procedures For Assignment Of Satellite Authorizations Should Be Fully Considered.

Apart from the broader policy considerations relating to allocation of the 28 GHz spectrum, the NPRM also raises issues concerning the appropriate mechanism for assigning licenses in these bands. Lockheed Martin is particularly concerned about the Commission's apparent embrace of auctions as a method for assignment of both Local Multipoint Distribution Service ("LMDS") and Fixed-Satellite Service ("FSS") authorizations that the Commission contemplates making available at 28 GHz. It is Lockheed Martin's view that the potential negative implications of reliance on auctions in the satellite context have not been fully considered by the Commission. Lockheed Martin would caution that great care must be taken in assessing the impact of auctions on national economic, technological and security interests related to U.S. global satellite initiatives.

1. While Auctions Are Appropriate For Domestic Terrestrial Services Where Many Similar Licenses Are Available, They May Be Ill-Suited To Inherently International Satellite Services Where There Are Distinct System Proposals.

Auctions are clearly suited to a service such as LMDS, where the service areas are local and well-defined and many similar, but discrete, licenses are likely to be available in hundreds of different markets. It is by no means clear, however, that auctions would be appropriate for satellite services, where the authorizations available will be used to provide a small number of nationwide, distinctly non-local services that will also transcend national boundaries. Not only is the number of licenses much more sharply limited in the satellite context than in the LMDS setting, the spectre of auctions implicates myriad issues of international comity and reciprocal entry that have the very real potential to jeopardize the commercial prospects of the service.

Lockheed Martin is encouraged that the Commission has emphasized the fact that Congress authorized the Commission to use competitive bidding procedures only where there are two or more mutually exclusive applications for initial licenses. See Third NPRM, FCC 95-287, slip op. at 49 (¶ 134). As the Commission goes on to point out, the legislation that established FCC authority to use competitive bidding procedures also states unambiguously that "[n]othing in [Section 309(j)], or in the use of competitive bidding, shall . . . be construed to relieve the Commission of the obligation in the public interest to continue to use engineering solutions, negotiation, threshold qualifications, service regulations, and other means in order to avoid mutual exclusivity in application and licensing proceedings." Id. (citing 47 U.S.C. § 309(j)(6)(E)).

This directive is of special significance with respect to satellite services, where the Commission has consistently used all of these measures to avoid situations of mutual exclusivity, thereby minimizing administrative costs and delays in the interest of expediting the initiation of new service.[1/] The Commission should not let its authority to use competitive bidding procedures deter it from continuing to pursue these time-tested methods of resolving mutual exclusivity in a manner consistent with its long-standing policies. Lockheed Martin believes that financial qualification requirements and coordination of orbit/spectrum usage among applicants, in particular, can continue to avert conflicts among most, if not all, FSS proposals.

The Commission observes accurately in the Third NPRM that at this time, "it is premature to determine whether mutual exclusivity will occur" with respect to applications for authority to construct Ka-band FSS systems (both geostationary and non-geostationary). Third NPRM, FCC 95-287, slip op. at 49 (¶ 136). However, even if the FCC were to receive such applications, and were to have difficulty resolving apparent mutual exclusivity, or encouraging applicants to resolve it, the character of the satellite services raises some significant questions concerning the utility of auctions.

In authorizing the Commission to establish competitive bidding procedures, Congress was careful to require that the Commission proceed in a manner "consistent with the public interest . . . , the purposes of this Act, and the characteristics of the proposed service." 47 U.S.C. § 309(j)(4)(C) (emphasis added). In the case of FSS systems, the characteristics of the service may simply be incompatible with the use of auctions.

1/ See, e.g., Processing of Pending Space Station Applications in the Domestic-Fixed Service, 93 F.C.C. 832, 839 and 840 (1983).

It is notable that the fundamental underpinning of the legislation authorizing auctions for assignment of radio licenses was premised on the advent of Personal Communications Services ("PCS") -- i.e., domestic, terrestrial mobile services for which thousands of licenses will ultimately be made available in hundreds of different markets.[2/] The domestic model that motivated Congress to enact the competitive bidding legislation, and that formed the basis for the Commission's adoption of auction procedures, does not easily translate to non-local, national and international satellite services,[3/] for which the number of bidders for any frequency/orbital combination must necessarily be extremely small (limited to a maximum of two or three in most cases) due to the scope of the service offered, the number of combinations available, and the enormous expense of implementing such distinct systems.

2. Using Auctions To Assign Satellite Licenses In The United States Would Produce International Consequences That Could Endanger The Viability Of Global Satellite Services.

The uncertain applicability of established auction procedures to services where all authorizations are national or international is compounded by potentially serious international ramifications. If the use of this satellite spectrum is auctioned in the United States, providers will almost certainly be subject elsewhere to demands for payment to access

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2/ See, e.g., Amendment of the Commission's Rules to Establish New Personal Communications Services (Second Report and Order), 8 FCC Rcd 7700 (1993).

3/ The FCC recently proposed to eliminate regulatory distinctions between domestic and international services, which would permit all U.S.-licensed satellite operators to offer capacity anywhere within their coverage area. See Regulatory Policies Governing Domestic-Fixed Satellites and Separate International Systems, FCC 95-146 (released April 25, 1995).

this spectrum within the borders of other nations that are covered by the footprint of the satellite.

Domestic bidding for licenses would not only expose U.S. licensees to possible high entry charges in other countries but, perhaps as significantly, it could expose the United States to a charge that it is violating long-established International Telecommunication Union ("ITU") policies against treating the orbit/spectrum resource as a mercantile commodity. Specifically, the U.S. could be seen as behaving similarly to countries that have pursued scarce orbital slots and spectrum for the exclusive purpose of reselling these resources for monetary gain. At the very least, a Commission decision to assign orbital locations by auction would be perceived, correctly or not, as a signal that this view of the satellite spectrum resource is gaining acceptance even by the United States -- which has consistently opposed this approach -- thereby fostering a "land rush" mentality with respect to available orbital slots. Certainly, the ability of the United States credibly to oppose auctions by other nations would be severely compromised.

If the Commission and the State Department remain interested in preserving the integrity of the current ITU allotment system and limiting national claims on the orbit/spectrum resource to those necessary to meet national requirements, each should consider carefully the potential impact of a U.S. decision to auction satellite authorizations. While other nations may still pursue their own course in considering the implementation of spectrum auctions, the U.S. example has already proved inspiring. For example, Commissioner Chong remarked last Fall upon her return from the ITU Plenipotentiary Conference in Kyoto that "everywhere I went, telecom ministers were pulling me aside to ask about our first auctions . . . they want to know how we did it." Communications Daily

at 4 (October 17, 1994) (emphasis added). The public interest is advanced by the perpetuation of the global leadership role earned by the U.S. satellite industry; it would be ill-served by a policy guided by the short-term desire to bring funds into the Federal Treasury that, by spawning imperfect imitators, has the long-term effect of undermining the capability of U.S. satellite systems to serve global markets.

It should not be assumed, for example, that attempts to replicate the U.S. approach to auctions constitute a worst case scenario. Having established an environment where the idea of auctioning international satellite authorizations is accepted, neither the Commission nor the U.S. government will have any control over precisely how auction procedures are implemented by other administrations. The FCC has structured its auctions in ways that are generally transparent and free from manipulation. The procedures implemented abroad to "auction" spectrum for satellite use may be somewhat less objectively reliable than those used in the United States.

An additional problem that would be likely to arise from a potential potpourri of auction policies around the world -- regardless of their reliability -- is uncertainty concerning the proper valuation of spectrum in any U.S. auction. As the Commission observed in adopting its initial competitive bidding rules, auction mechanisms function best when all bidders are well-informed concerning the utility and value of the spectrum.[4/] If auctions proceed in the U.S. for FSS spectrum, bidders would be left with substantial uncertainties concerning what they are getting because there would be many unknowns relating to access to the same spectrum in other countries. Because neighboring countries

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4/ See Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, 9 FCC Rcd 2348, 2362 (1994).

could adopt differing allocation and assignment schemes that would affect U.S. domestic operations, bidders would not be well-informed as to the practical value of the spectrum -- even in this country. When there are doubts concerning the potential utility of spectrum, it will not obtain bids that reflect its true value.

3. Using Auctions To Assign Spetrum Could Undermine Efforts To Rely On Commercial Satellite Capacity To Meet U.S. National Security Needs.

As a final matter, the use of auctions for assigning spectrum for satellite use could have wholly unintended national security consequences. Currently, the prevailing view within the national security policy community is that increased reliance on commercial telecommunications systems will afford the most efficient and cost-effective approach to fulfilling future military and other national security communications requirements.

As a result of dramatic developments in satellite communications technology, an inexpensive, truly worldwide communications capability is quickly emerging that will significantly enhance security, redundancy, speed, economy, and ease of operation, while also carrying far greater traffic loads. During Operation Desert Storm nearly 75% of military traffic traveled over commercial systems, demonstrating the significant advantages that commercial availability and interconnectivity with military systems can provide to enhance military capability and efficiency during future conflicts. Moreover, affordable military systems will be heavily dependent on commercially developed technology.

Ill-considered spectrum allocation or assignment approaches could impede plans to meet a greater portion of the government's defense-related communications needs through reliance on commercial satellite systems. This impact, in turn, could substantially

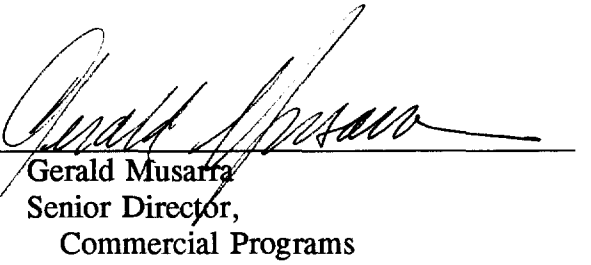
increase the resource burden on the U.S. government for future military communications requirements.

III. CONCLUSION

For the foregoing reasons, Lockheed Martin urges the Commission to pursue policies that will foster the development of new, innovative satellite technologies in the 28 GHz band spectrum. In working toward this goal, it further encourages the Commission to weigh with great care the potential impact that assigning satellite authorizations through competitive bidding might have on the growth of the Ka-band for expansion of U.S. domestic and international space systems.

Respectfully submitted,

LOCKHEED MARTIN CORPORATION

By: 

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